

=> d his

(FILE 'HOME' ENTERED AT 15:46:22 ON 07 JUL 2003)

FILE 'CAPLUS' ENTERED AT 15:47:56 ON 07 JUL 2003

L1 105 S FUMITREMORGIN?
L2 15 S L1 AND DRUG(10A)RESIST?
L3 0 S L2 NOT PY>=1998
L4 15 S L1(L)CANCER?
L5 0 S L4 NOT PY>=1999

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 15:51:42 ON 07 JUL 2003

SEA L4 OR L2

1 FILE ADISCTI
1 FILE ADISINSIGHT
19 FILE BIOSIS
2 FILE BIOTECHABS
2 FILE BIOTECHDS
10 FILE BIOTECHNO
9 FILE CANCERLIT
19 FILE CAPLUS
12 FILE DDFU
13 FILE DRUGU
13 FILE EMBASE
11 FILE ESBIODBASE
6 FILE IFIPAT
2 FILE LIFESCI
16 FILE MEDLINE
6 FILE PASCAL
18 FILE SCISEARCH
18 FILE TOXCENTER
10 FILE USPATFULL
2 FILE WPIDS
2 FILE WPINDEX

L6 QUE L4 OR L2

FILE 'BIOSIS, CAPLUS, SCISEARCH, TOXCENTER, MEDLINE, DRUGU, EMBASE, ESBIODBASE, BIOTECHNO, USPATFULL, CANCERLIT, IFIPAT, PASCAL, BIOTECHDS, LIFESCI, WPIDS, ADISCTI, ADISINSIGHT' ENTERED AT 15:54:03 ON 07 JUL 2003

L7 176 S L6
L8 12 S L7 NOT PY>=1999
L9 146 S L4
L10 44 DUP REM L9 (102 DUPLICATES REMOVED)
L11 1 S L10 NOT PY>=1999

FILE 'STNGUIDE' ENTERED AT 16:06:54 ON 07 JUL 2003

FILE 'BIOSIS, CAPLUS, SCISEARCH, TOXCENTER, MEDLINE, DRUGU, EMBASE, ESBIODBASE, BIOTECHNO, USPATFULL, CANCERLIT, IFIPAT, PASCAL, BIOTECHDS, LIFESCI, WPIDS, ADISCTI, ADISINSIGHT' ENTERED AT 16:07:07 ON 07 JUL 2003

L12 118 S L1 AND (TUMOR? OR NEOPLAS?)
L13 49 DUP REM L12 (69 DUPLICATES REMOVED)
L14 7 S L13 NOT PY>=1999

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FILE 'IFIPAT' ENTERED AT 15:54:03 ON 07 JUL 2003
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FILE 'ADISINSIGHT' ENTERED AT 15:54:03 ON 07 JUL 2003
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=> s 16
    7 FILES SEARCHED...
    11 FILES SEARCHED...
    17 FILES SEARCHED...
L7      176 L6
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L10 ANSWER 40 OF 44 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 19
 ACCESSION NUMBER: 2000:872654 CAPLUS
 DOCUMENT NUMBER: 134:216800
 TITLE: Inhibition of BCRP-mediated drug efflux by
 fumitremorgin-type indolyl diketopiperazines
 AUTHOR(S): van Loevezijn, A.; Allen, J. D.; Schinkel, A. H.;
 Koomen, G.-J.
 CORPORATE SOURCE: Institute of Molecular Chemistry, Laboratory of
 Organic Chemistry, University of Amsterdam, Amsterdam,
 NL-1018 WS, Neth.
 SOURCE: Bioorganic & Medicinal Chemistry Letters (2000),
 Volume Date 2001, 11(1), 29-32
 CODEN: BMCLE8; ISSN: 0960-894X
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 REFERENCE COUNT: 23

THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB A library of 42 diastereoisomeric mixts. of **fumitremorgin**-type
 indolyl diketopiperazines, prepd. by parallel solid-phase synthesis, was
 screened for breast **cancer** resistance protein inhibitory
 activity and compared with GF120918. Demethoxy-**fumitremorgin** C
 was synthesized (no data) by solid-phase techniques and tested as well.
 Structure-activity relationship studies have identified several potent
 analogs, both in assays using the T6400 mouse and the T8 human cell line,
 whereas low cytotoxicity was seen at effective concns.
 ST **fumitremorgin** indolyl diketopiperazine inhibitor breast
cancer resistance protein; mitoxantrone inhibitor breast
cancer resistance protein; structure activity breast
cancer resistance protein
 IT Structure-activity relationship
 (inhibition of breast **cancer**-resistance protein-mediated drug
 efflux by **fumitremorgin**-type indolyl diketopiperazines)
 IT 235092-43-0, Transport protein (human BCRP (breast **cancer**
 resistance protein))
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
 (Biological study); PROC (Process)
 (inhibitors; inhibition of breast **cancer**-resistance
 protein-mediated drug efflux by **fumitremorgin**-type indolyl
 diketopiperazines)
 IT 65271-80-9, Mitoxantrone 111768-16-2, Demethoxy **fumitremorgin**
 C 118974-02-0D, 12.alpha.-**Fumitremorgin** C, analogs and derivs.
 211359-48-7 211359-49-8 211359-50-1 211359-51-2 211359-52-3
 211359-53-4 211359-60-3 211359-61-4 211359-62-5 211359-63-6
 211359-64-7 211359-65-8 211359-66-9 211359-67-0 211359-68-1
 211359-69-2 211359-70-5 211359-71-6 211359-72-7 211359-73-8
 211359-74-9 211359-75-0 211359-76-1 211359-77-2 211359-78-3
 211359-79-4 211359-80-7 211359-81-8 211359-82-9 211359-83-0
 211359-84-1 211359-85-2 211359-86-3 211359-87-4 211359-88-5
 211359-89-6 329356-33-4 329356-34-5 329356-35-6 329356-36-7
 329356-37-8 329356-38-9 329356-40-3 329356-41-4 329356-42-5
 329356-43-6 329356-44-7 329356-45-8
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); BIOL (Biological study)
 (inhibition of breast **cancer**-resistance protein-mediated drug
 efflux by **fumitremorgin**-type indolyl diketopiperazines)

L10 ANSWER 41 OF 44 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 20
 ACCESSION NUMBER: 1999:511178 CAPLUS
 DOCUMENT NUMBER: 131:143080
 TITLE: A multidrug resistance protein associated with
 antitumor drug resistance in breast cancer and a cDNA
 encoding it
 INVENTOR(S): Ross, Douglas D.; Doyle, L. Austin; Abruzzo, Lynne

PATENT ASSIGNEE(S): University of Maryland, Baltimore, USA
 SOURCE: PCT Int. Appl., 79 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9940110	A1	19990812	WO 1999-US2577	19990205
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2319715	AA	19990812	CA 1999-2319715	19990205
AU 9927610	A1	19990823	AU 1999-27610	19990205
AU 755567	B2	20021212		
EP 1054894	A1	20001129	EP 1999-908097	19990205
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 6313277	B1	20011106	US 1999-245808	19990205
JP 2002502592	T2	20020129	JP 2000-530538	19990205
US 2003036645	A1	20030220	US 2001-961086	20010921
PRIORITY APPLN. INFO.:				
US 1998-73763P P 19980205				
US 1999-245808 A3 19990205				
WO 1999-US2577 W 19990205				
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT				
AB	The Breast Cancer Resistance Protein, a protein involved in the resistance of breast cancer to neoplasm inhibitors has been identified and a cDNA encoding it cloned and expressed. The protein may be if use in studying multidrug resistance in breast cancer and in developing alternate chemotherapies. The protein is a xenobiotic transporter conferring multidrug resistance that is a member ATP-binding cassette superfamily of transporter proteins. The protein confers resistance to mitoxantrone, doxorubicin, and daunorubicin but not to fumitremorgin C .			
ST	breast cancer chemotherapy resistance transporter protein cDNA; BCRP breast cancer resistance protein cDNA cloning; fumitremorgin C breast cancer chemotherapy			
IT	118974-02-0, Fumitremorgin C RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (treatment of multidrug resistant breast cancer with; multidrug resistance protein assocd. with antitumor drug resistance in breast cancer and cDNA encoding it)			
L10 ANSWER 42 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 21				
ACCESSION NUMBER: 1999:166654 BIOSIS				
DOCUMENT NUMBER: PREV199900166654				
TITLE: Multiple mechanisms confer drug resistance to mitoxantrone in the human 8226 myeloma cell line.				
AUTHOR(S): Hazlehurst, Lori A.; Foley, Nils E.; Gleason-Guzman, Mary C.; Hacker, Miles P.; Cress, Anne E.; Greenberger, Lee W.; De Jong, Mariska C.; Dalton, William S. (1)				
CORPORATE SOURCE: (1) H. Lee Moffitt Cancer Center Res. Inst., 12902 Magnolia Drive, Tampa, FL 33612-9497 USA				
SOURCE: Cancer Research, (March 1, 1999) Vol. 59, No. 5, pp. 1021-1028.				

ISSN: 0008-5472.

DOCUMENT TYPE: Article

LANGUAGE: English

AB. . . line. The reduction in intracellular drug concentration of both mitoxantrone and BBR 3390 was reversed by a novel chemosensitizing agent, **fumitremorgin C**. In contrast, **fumitremorgin C** had no effect on resistance to mitoxantrone or BBR 3390 in the P-glycoprotein-positive 8226/DOX6 cell line. Increasing the degree. . . novel, energy-dependent drug efflux pump similar to P-glycoprotein and multidrug resistance-associated protein. Reversal of resistance by blocking drug efflux with **fumitremorgin C** should allow for functional analysis of this novel transporter in **cancer** cell lines or clinical tumor samples. Increased resistance to mitoxantrone may result from reduced intracellular drug accumulation, altered nuclear/cytoplasmic drug. . .

L10 ANSWER 43 OF 44 DRUGU COPYRIGHT 2003 THOMSON DERWENTDUPLICATE 22

ACCESSION NUMBER: 1999-34684 DRUGU P

TITLE: Fumitremorgin C reverses a novel multidrug resistance mechanism in mitoxantrone-selected cells.

AUTHOR: Rabindran S K; He H; Singh M; Ross D D; Doyle L A; Yang W

CORPORATE SOURCE: Wyeth-Ayerst; Univ.Maryland; Nat.Cancer-Inst.Bethesda

LOCATION: Pearl River, N.Y.; Baltimore; Bethesda, Md., USA

SOURCE: Proc.Am.Assoc.Cancer Res. (40, 90 Meet., 315-16, 1999)

ISSN: 0197-016X

AVAIL. OF DOC.: Wyeth-Ayerst Research, Pearl River, NY 10965, U.S.A. (8 Authors).

LANGUAGE: English

DOCUMENT TYPE: Journal

FIELD AVAIL.: AB; LA; CT

FILE SEGMENT: Literature

AB The ability of **fumitremorgin C** (FTC) to reverse multidrug resistance of human colon carcinoma S1-M1-3.2 cells was investigated in-vitro. The rearrangement and overexpression of the gene for the half-transporter ATP-binding cassette protein, breast **cancer** resistance protein/mitoxantrone resistance gene (BCRP/MXR), was the major mechanism of resistance in S1-M1-3.2 cells. FTC was effective in reversing resistance. . . that FTC is a selective reversal agent for BCRP/MXR-mediated resistance. (conference abstract: 90th Annual Meeting of the American Association for **Cancer** Research, Philadelphia, Pennsylvania, USA, 1999). (No EX).

L10 ANSWER 44 OF 44 ADISINSIGHT COPYRIGHT (C) 2003 Adis Data Information BV

TX TEXT

Introduction:

Fumitremorgin C is a novel chemosensitising agent that was undergoing preclinical investigation with Wyeth-Ayerst, the University of Maryland, Baltimore, and the Baltimore Veterans Medical Center, USA, as a potential means of reversing drug resistance in **cancer** patients. However, no recent development of **fumitremorgin C** has been reported.

TX PHARMACOLOGY:

Pharmacodynamics (**Cancer**):

Preclinical studies: **fumitremorgin C** has been shown to reverse mitoxantrone-resistance in S1-M1-3.2 human colon **cancer** cells which overexpress the breast **cancer** resistance protein (BCRP). Reversal of drug-resistance was also observed in mitoxantrone- and doxorubicin and verapamil-resistant MCF-7 human breast **cancer** and mitoxantrone-resistant 8226 multiple myeloma cells overexpressing BCRP. In these cell lines, fumitremorgin C-induced reversal of resistance was associated with increases in the amount of drug accumulation in the cells. In MCF-7/BCRP cells, **fumitremorgin C** (5 micromol/L)

caused 29.4-, 6.6- and 6.5-fold increases in the toxicities of mitoxantrone, doxorubicin and topotecan, respectively. It did. . .

=> d 110 ibib 30-39

L10 ANSWER 30 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2002:220608 BIOSIS
DOCUMENT NUMBER: PREV200200220608
TITLE: Expression and activity of breast cancer resistance protein (BCRP) in de novo and relapsed acute myeloid leukemia.
AUTHOR(S): van der Kolk, Dorina M. (1); Vellenga, Edo (1); Scheffer, George L.; Muller, Michael; Bates, Susan E.; Scheper, Rik J.; de Vries, Elisabeth G. E. (1)
CORPORATE SOURCE: (1) Hematology and Medical Oncology, University Hospital Groningen, Groningen Netherlands
SOURCE: Blood, (November 16, 2001) Vol. 98, No. 11 Part 1, pp. 715a-716a. <http://www.bloodjournal.org/>. print.
Meeting Info.: 43rd Annual Meeting of the American Society of Hematology, Part 1 Orlando, Florida, USA December 07-11, 2001
ISSN: 0006-4971.
DOCUMENT TYPE: Conference
LANGUAGE: English

L10 ANSWER 31 OF 44 SCISEARCH COPYRIGHT 2003 THOMSON ISI
ACCESSION NUMBER: 2002:71391 SCISEARCH
THE GENUINE ARTICLE: 511TE
TITLE: The role of half-transporters in multidrug resistance
AUTHOR: Bates S E (Reprint); Robey R; Miyake K; Rao K; Ross D D; Litman T
CORPORATE SOURCE: NCI, Med Branch, Bldg 10, Bethesda, MD 20892 USA (Reprint); NCI, Med Branch, Bethesda, MD 20892 USA; Univ Maryland, Greenebaum Canc Ctr, College Pk, MD 20742 USA; Univ Maryland, Sch Med, Dept Med, Div Hematol Oncol, College Pk, MD 20742 USA; Vet Adm Med Ctr, Baltimore, MD 21218 USA; Herlev Univ Hosp, Lab Oncol, DK-2730 Herlev, Denmark
COUNTRY OF AUTHOR: USA; Denmark
SOURCE: JOURNAL OF BIOENERGETICS AND BIOMEMBRANES, (DEC 2001) Vol. 33, No. 6, pp. 503-511.
Publisher: KLUWER ACADEMIC/PLENUM PUBL, 233 SPRING ST, NEW YORK, NY 10013 USA.
ISSN: 0145-479X.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 49

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L10 ANSWER 32 OF 44 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:46901 CAPLUS
DOCUMENT NUMBER: 137:125308
TITLE: Solid phase synthesis of fumitremorgin-type and other indole alkaloids based on cyclization/cleavage strategy
AUTHOR(S): van Loevezijn, Arnold; Rodenko, Boris; Sorm, Willem P.; van Maarseveen, Jan H.; Stegman, Karel; Visser, Geb M.; van Delft, Floris L.; Koomen, Gerrit-Jan
CORPORATE SOURCE: Laboratory of Organic Chemistry, Institute for Molecular Chemistry, University of Amsterdam, Amsterdam, NL-1018 WS, Neth.
SOURCE: Innovation and Perspectives in Solid Phase Synthesis & Combinatorial Libraries: Peptides, Proteins and Nucleic Acids--Small Molecule Organic Chemistry

Diversity, Collected Papers, International Symposium,
6th, York, United Kingdom, Aug. 31-Sept. 4, 1999 (2001
) , Meeting Date 1999, 367-370. Editor(s): Epton, Roger. Mayflower
Scientific Ltd.: Kingswinford, UK.
CODEN: 69CEGV; ISBN: 0-9515735-3-5

DOCUMENT TYPE: Conference
LANGUAGE: English
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 33 OF 44 SCISEARCH COPYRIGHT 2003 THOMSON ISIDUPLICATE 14
ACCESSION NUMBER: 2001:515626 SCISEARCH
THE GENUINE ARTICLE: 444TG
TITLE: A functional assay for detection of the mitoxantrone
resistance protein, MXR (ABCG2)
AUTHOR: Robey R W; Honjo Y; van de Laar A; Miyake K; Regis J T;
Litman T; Bates S E (Reprint)
CORPORATE SOURCE: NCI, Dev Therapeut Dept, Med Branch, Ctr Canc Res, NIH,
Bldg 10, Room 12N226, 9000 Rockville Pike, Bethesda, MD
20892 USA (Reprint); NCI, Dev Therapeut Dept, Med Branch,
Ctr Canc Res, NIH, Bethesda, MD 20892 USA
COUNTRY OF AUTHOR: USA
SOURCE: BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES, (6 JUN 2001)
Vol. 1512, No. 2, pp. 171-182.
Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE
AMSTERDAM, NETHERLANDS.
ISSN: 0005-2736.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 40
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L10 ANSWER 34 OF 44 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 15
ACCESSION NUMBER: 2001:121246 CAPLUS
DOCUMENT NUMBER: 135:70810
TITLE: Overexpression of the ATP-binding cassette
half-transporter, ABCG2 (MXR/BCRP/ABCP1), in
flavopiridol-resistant human breast cancer cells
AUTHOR(S): Robey, Robert W.; Medina-Perez, Wilma Y.; Nishiyama,
Kenryu; Lahusen, Tyler; Miyake, Keisuke; Litman,
Thomas; Senderowicz, Adrian M.; Ross, Douglas D.;
Bates, Susan E.
CORPORATE SOURCE: Developmental Therapeutics Department, Medicine
Branch, National Cancer Institute, NIH, Bethesda, MD,
20892, USA
SOURCE: Clinical Cancer Research (2001), 7(1), 145-152
CODEN: CCREF4; ISSN: 1078-0432
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 35 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE
16
ACCESSION NUMBER: 2001:371212 BIOSIS
DOCUMENT NUMBER: PREV200100371212
TITLE: Functional characterization of the human multidrug
transporter, ABCG2, expressed in insect cells.
AUTHOR(S): Ozvegy, Csilla; Litman, Thomas; Szakacs, Gergely; Nagy,
Zoltan; Bates, Susan; Varadi, Andras; Sarkadi, Balazs (1)
CORPORATE SOURCE: (1) Membrane Research Group, National Institute of
Haematology and Immunology, Hungarian Academy of Sciences,
Daroczi ut 24, H-1113, Budapest: sarkadi@biomembrane.hu

SOURCE: Hungary
Biochemical and Biophysical Research Communications, (July
6, 2001) Vol. 285, No. 1, pp. 111-117. print.
ISSN: 0006-291X.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 36 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE
17

ACCESSION NUMBER: 2001:77915 BIOSIS
DOCUMENT NUMBER: PREV200100077915
TITLE: Inhibition of BCRP-mediated drug efflux by
fumitremorgin-type indolyl diketopiperazines.
AUTHOR(S): van Loevezijn, Arnold; Allen, John D.; Schinkel, Alfred H.;
Koomen, Gerrit-Jan (1)
CORPORATE SOURCE: (1) Laboratory of Organic Chemistry, Institute of Molecular
Chemistry, University of Amsterdam, Nieuwe Achtergracht
129, NL-1018 WS, Amsterdam: gjk@org.chem.uva.nl Netherlands
SOURCE: Bioorganic & Medicinal Chemistry Letters, (8 January, 2001)
Vol. 11, No. 1, pp. 29-32. print.
ISSN: 0960-894X.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 37 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 2000:275622 BIOSIS
DOCUMENT NUMBER: PREV200000275622
TITLE: Overexpression of the breast cancer resistance
protein (BCRP) induces resistance to mitoxantrone,
daunorubicin, topotecan, vincristin and SN-38 which can be
blocked by novobiocin and fumitremorgin C (FTC).
Quantification by the comparative growth assay.
AUTHOR(S): Hausner, Petr Frantisek (1); Sun, Rong Jung (1); Ross,
Douglas D. (1); Doyle, Laurence Austin (1)
CORPORATE SOURCE: (1) Univ of Maryland Medicine, Baltimore, MD USA
SOURCE: Proceedings of the American Association for Cancer Research
Annual Meeting, (March, 2000) No. 41, pp. 801. print..
Meeting Info.: 91st Annual Meeting of the American
Association for Cancer Research. San Francisco, California,
USA April 01-05, 2000
ISSN: 0197-016X.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 38 OF 44 DRUGU COPYRIGHT 2003 THOMSON DERWENT

ACCESSION NUMBER: 2000-32991 DRUGU P
TITLE: Overexpression of the breast cancer resistance
protein (BCRP) induces resistance to mitoxantrone,
daunorubicin, topotecan, vincristine and SN-38 which can be
blocked by novobiocin and fumitremorgin C (FTC).
Quantification by the comparative growth assay.
AUTHOR: Hausner P F; Sun R J; Ross D D; Doyle L A
CORPORATE SOURCE: Univ.Maryland
LOCATION: Baltimore, Md., USA
SOURCE: Proc.Am.Assoc.Cancer Res. (41, 91 Meet., 801, 2000) ISS
N: 0197-016X
AVAIL. OF DOC.: Univ of Maryland Medicine, Baltimore, MD, U.S.A.
LANGUAGE: English
DOCUMENT TYPE: Journal
FIELD AVAIL.: AB; LA; CT
FILE SEGMENT: Literature

L10 ANSWER 39 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE
18

ACCESSION NUMBER: 2000:110068 BIOSIS

DOCUMENT NUMBER: PREV200000110068

TITLE: **Fumitremorgin C** reverses multidrug resistance in
cells transfected with the breast **cancer**
resistance protein.

AUTHOR(S): Rabindran, Sridhar K. (1); Ross, Douglas D.; Doyle, L.
Austin; Yang, Weidong; Greenberger, Lee M.

CORPORATE SOURCE: (1) Wyeth-Ayerst Research, 401 North Middletown Road,
Building 200, Room 4608, Pearl River, NY, 10965 USA

SOURCE: Cancer Research, (Jan., 2000) Vol. 60, No. 1, pp. 47-50.
ISSN: 0008-5472.

DOCUMENT TYPE: Article

LANGUAGE: English

SUMMARY LANGUAGE: English

L14 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1992:210833 CAPLUS

DOCUMENT NUMBER: 116:210833

TITLE: Structures of cytotoxic substances and new quinazoline derivatives produced by a fungus from a saltwater fish

AUTHOR(S): Numata, Atsushi; Takahashi, Chika; Miyamoto, Tamie; Matsushita, Tomochika; Kawai, Kenzo; Usami, Yoshihide; Matsumura, Eiko; Inoue, Masatoshi; Ohishi, Hirofumi; Shingu, Tetsuro

CORPORATE SOURCE: Osaka Univ. Pharm. Sci., Osaka, Japan

SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1991), 33rd, 723-30

CODEN: TYKYDS

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

IT **Neoplasm inhibitors**

(leukemia, fumiquinazolines as, from *Aspergillus fumigatus*)

IT 67-99-2, Gliotoxin 253-82-7D, Quinazoline, derivs. 12771-72-1, Verruculogen 51177-07-2 62867-47-4, Fumigaclavine C 74149-38-5

111427-99-7, TR 3 111468-06-5 115589-18-9 118974-02-0,

Fumitremorgin C 137494-04-3 140715-85-1, Fumiquinazoline A

140715-86-2, Fumiquinazoline D 140715-87-3, Fumiquinazoline E

140852-71-7, Fumiquinazoline B 140924-01-2, Fumiquinazoline C

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(structure and cytotoxic activity of, from *Aspergillus fumigatus*)

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9107 104-15-4/BI
10 107454-63-7/BI L2
4 107494-27-9/BI }
4 107537-42-8/BI
5 107537-43-9/BI L5
16 111768-16-2/BI
29 118974-02-0/BI L7
42 12626-17-4/BI
24 12626-18-5/BI
3 127940-23-2/BI
24098 147-85-3/BI
39 14907-27-8/BI
124 1723-00-8/BI
5 191279-38-6/BI
6 197891-66-0/BI
372 2133-34-8/BI
— 7 25408-61-1/BI L17
2 259526-93-7/BI
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2 259526-95-9/BI
2 259526-96-0/BI
2 259526-97-1/BI
2 259526-98-2/BI
3 259526-99-3/BI
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2 259527-02-1/BI
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2 259527-04-3/BI
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2 259527-20-3/BI L48
2 259527-21-4/BI
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58 26988-71-6/BI
293 3105-95-1/BI
789 344-25-2/BI
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1 410532-92-2/BI
1 410532-93-3/BI
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25153 68-12-2/BI
9 69787-67-3/BI
9 69832-15-1/BI
23 79815-18-2/BI
L2 63044 (104-15-4/BI OR 107454-63-7/BI OR 107494-27-9/BI OR 107537-42-8/

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1-6/BI OR 3105-95-1/BI OR 344-25-2/BI OR 410532-75-1/BI OR 41053
2-87-5/BI OR 410532-89-7/BI OR 410532-90-0/BI OR 410532-91-1/BI
OR 410532-92-2/BI OR 410532-93-3/BI OR

L11 ANSWER 1 OF 47 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2003:335139 CAPLUS

DOCUMENT NUMBER: 138:332878

TITLE: Application of a human multidrug transporter (abcg2) variant as selectable marker in gene transfer to progenitor cells and in gene therapy

INVENTOR(S): Nemet, Katalin; Varadi, Gyorgy; Cervenak, Judit; Ujhelly, Olga; Sarkadi, Balazs; Varadi, Andras; Oezvegy, Csilla

PATENT ASSIGNEE(S): Solvo Biotechnology Inc., Hung.

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003035685	A1	20030501	WO 2002-HU108	20021024
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
WO 2002071073	A2	20020912	WO 2002-HU15	20020304
WO 2002071073	A3	20030403		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:			HU 2001-4446	A 20011024
			WO 2002-HU15	A 20020304
			HU 2002-3435	A 20021011
			HU 2001-947	A 20010302
REFERENCE COUNT:	9	THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L11 ANSWER 2 OF 47 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2003:3461 CAPLUS

DOCUMENT NUMBER: 138:395505

TITLE: Breast cancer resistance protein (BCRP/ABCG2) induces cellular resistance to HIV-1 nucleoside reverse transcriptase inhibitors

AUTHOR(S): Wang, Xin; Furukawa, Tatsuhiko; Nitanda, Takao; Okamoto, Mika; Sugimoto, Yoshikazu; Akiyama, Shin-Ichi; Baba, Masanori

CORPORATE SOURCE: Division of Human Retroviruses, Center for Chronic Viral Diseases, Faculty of Medicine, Kagoshima University, Kagoshima, Japan

SOURCE: Molecular Pharmacology (2003), 63(1), 65-72

CODEN: MOPMA3; ISSN: 0026-895X
 PUBLISHER: American Society for Pharmacology and Experimental
 Therapeutics
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 47 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:696659 CAPLUS
 DOCUMENT NUMBER: 137:222100
 TITLE: Improving bioavailability of orally administered
 drugs, screening for enhancers of such bioavailability
 and oral drug delivery compositions
 INVENTOR(S): Schellens, Johannes Henricus Matthias; Schinkel,
 Alfred Hermanus
 PATENT ASSIGNEE(S): Netherlands Cancer Institute, Neth.
 SOURCE: U.S. Pat. Appl. Publ., 11 pp., Cont.-in-part of Appl.
 No. PCT/NL00/00331.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002128282	A1	20020912	US 2001-988285	20011119
WO 2000069390	A2	20001123	WO 2000-NL331	20000517
WO 2000069390	A3	20011213		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
 CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
 ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
 LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
 SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,
 ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: NL 1999-1012066 A 19990517
 NL 1999-1012481 A 19990630
 WO 2000-NL331 A2 20000517

L11 ANSWER 4 OF 47 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:696257 CAPLUS
 DOCUMENT NUMBER: 137:226574
 TITLE: Screening system based on expression of ABCG2 half
 transporter protein
 INVENTOR(S): Oezvegy, Csilla; Szakacs, Gergely; Varadi, Andras;
 Nagy, Zoltan
 PATENT ASSIGNEE(S): Solvo Biotechnology Inc., Hung.
 SOURCE: PCT Int. Appl., 26 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002071073	A2	20020912	WO 2002-HU15	20020304
WO 2002071073	A3	20030403		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
 TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
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 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 WO 2003035685 A1 20030501 WO 2002-HU108 20021024
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
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 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
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 RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
 PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
 NE, SN, TD, TG

PRIORITY APPLN. INFO.: HU 2001-947 A 20010302
 HU 2001-4446 A 20011024
 WO 2002-HU15 A 20020304
 HU 2002-3435 A 20021011

L11 ANSWER 5 OF 47 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:524344 CAPLUS
 DOCUMENT NUMBER: 138:201203
 TITLE: Flow cytometric analysis of breast cancer resistance
 protein expression and function
 AUTHOR(S): Minderman, Hans; Suvannasankha, Attaya; O'Loughlin,
 Kieran L.; Scheffer, George L.; Scheper, Rik J.;
 Robey, Robert W.; Baer, Maria R.
 CORPORATE SOURCE: Leukemia Section, Department of Medicine, Roswell Park
 Cancer Institute, Buffalo, NY, USA
 SOURCE: Cytometry (2002), 48(2), 59-65
 CODEN: CYTODQ; ISSN: 0196-4763
 PUBLISHER: Wiley-Liss, Inc.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 47 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:290794 CAPLUS
 DOCUMENT NUMBER: 136:304053
 TITLE: Reversal of multidrug resistance in human colon
 carcinoma cells using fumitremorgins and
 diketopiperazines
 INVENTOR(S): Rabindran, Sridhar Krishna; He, Haiyin; Greenberger,
 Lee Martin
 PATENT ASSIGNEE(S): American Cyanamid Company, USA
 SOURCE: U.S., 19 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6372775	B1	20020416	US 1999-321182	19990527
US 2002156015	A1	20021024	US 2002-86169	20020228
US 2002169111	A1	20021114	US 2002-86132	20020228

US 6537964 B1 20030325 US 2002-86170 20020228
US 2003083230 A1 20030501 US 2002-86133 20020228
PRIORITY APPLN. INFO.: US 1998-109801P P 19980527
US 1999-321182 A3 19990527
OTHER SOURCE(S): MARPAT 136:304053
REFERENCE COUNT: 72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:487684 CAPLUS
DOCUMENT NUMBER: 135:328480
TITLE: Functional Characterization of the Human Multidrug
Transporter, ABCG2, Expressed in Insect Cells
AUTHOR(S): Ozvegy, Csilla; Litman, Thomas; Szakacs, Gergely;
Nagy, Zoltan; Bates, Susan; Varadi, Andras; Sarkadi,
Balazs
CORPORATE SOURCE: Institute of Enzymology, Biological Research Center,
Hungarian Academy of Sciences, Budapest, H-1113, Hung.
SOURCE: Biochemical and Biophysical Research Communications
(2001), 285(1), 111-117
CODEN: BBRCA9; ISSN: 0006-291X
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:429174 CAPLUS
DOCUMENT NUMBER: 135:285265
TITLE: A functional assay for detection of the mitoxantrone
resistance protein, MXR (ABCG2)
AUTHOR(S): Robey, R. W.; Honjo, Y.; van de Laar, A.; Miyake, K.;
Regis, J. T.; Litman, T.; Bates, S. E.
CORPORATE SOURCE: Center for Cancer Research, Medicine Branch,
Developmental Therapeutics Department, National Cancer
Institute, National Institutes of Health, Bethesda,
MD, 20892, USA
SOURCE: Biochimica et Biophysica Acta (2001), 1512(2), 171-182
CODEN: BBACAQ; ISSN: 0006-3002
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 9 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:1542 CAPLUS
DOCUMENT NUMBER: 135:1496
TITLE: Species-specific profiles of mycotoxins produced in
cultures and associated with conidia of airborne fungi
derived from biowaste
AUTHOR(S): Fischer, Guido; Muller, Thomas; Schwalbe, Regina;
Ostrowski, Rene; Dott, Wolfgang
CORPORATE SOURCE: Institute of Hygiene and Environmental Medicine,
University Hospital, RWTH Aachen, Aachen, D-52057,
Germany
SOURCE: International Journal of Hygiene and Environmental
Health (2000), 203(2), 105-116
CODEN: IJEHFT; ISSN: 1438-4639
PUBLISHER: Urban & Fischer Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 47 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:895663 CAPLUS
 DOCUMENT NUMBER: 134:178712
 TITLE: A concise, efficient route to fumitremorgins
 AUTHOR(S): Bailey, P. D.; Cochrane, P. J.; Lorenz, K.; Collier, I. D.; Pearson, D. P. J.; Rosair, G. M.
 CORPORATE SOURCE: Department of Chemistry, Heriot-Watt University, Riccarton, Edinburgh, EH14 4AS, UK
 SOURCE: Tetrahedron Letters (2001), 42(1), 113-115
 CODEN: TELEAY; ISSN: 0040-4039
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 134:178712
 REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 11 OF 47 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:872654 CAPLUS
 DOCUMENT NUMBER: 134:216800
 TITLE: Inhibition of BCRP-mediated drug efflux by fumitremorgin-type indolyl diketopiperazines
 AUTHOR(S): van Loevezijn, A.; Allen, J. D.; Schinkel, A. H.; Koomen, G.-J.
 CORPORATE SOURCE: Institute of Molecular Chemistry, Laboratory of Organic Chemistry, University of Amsterdam, Amsterdam, NL-1018 WS, Neth.
 SOURCE: Bioorganic & Medicinal Chemistry Letters (2000), Volume Date 2001, 11(1), 29-32
 CODEN: BMCLE8; ISSN: 0960-894X
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 12 OF 47 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:824069 CAPLUS
 DOCUMENT NUMBER: 134:9341
 TITLE: A method of improving bioavailability of orally administered drugs, screening for enhancers of such bioavailability and novel pharmaceutical compositions for oral delivery of drugs
 INVENTOR(S): Schellens, Johannes Henricus Matthias; Schinkel, Alfred Hermanus
 PATENT ASSIGNEE(S): Het Nederlands Kankerinstituut, Neth.
 SOURCE: PCT Int. Appl., 25 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069390	A2	20001123	WO 2000-NL331	20000517
WO 2000069390	A3	20011213		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,

ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 AU 2000049552 A5 20010205 AU 2000-49552 20000517
 EP 1189637 A2 20020327 EP 2000-931720 20000517
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO
 US 2002128282 A1 20020912 US 2001-988285 20011119
 PRIORITY APPLN. INFO.: NL 1999-1012066 A 19990517
 NL 1999-1012481 A 19990630
 WO 2000-NL331 W 20000517

L11 ANSWER 13 OF 47 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:417317 CAPLUS
 DOCUMENT NUMBER: 133:193311
 TITLE: A Biomimetic Total Synthesis of (-)-Spirotryprostatin
 B and Related Studies
 AUTHOR(S): Wang, Haishan; Ganesan, A.
 CORPORATE SOURCE: Institute of Molecular and Cell Biology, National
 University of Singapore, Singapore, 117609, Singapore
 SOURCE: Journal of Organic Chemistry (2000), 65(15), 4685-4693
 CODEN: JOCEAH; ISSN: 0022-3263
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 133:193311
 REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 14 OF 47 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:72225 CAPLUS
 DOCUMENT NUMBER: 132:216690
 TITLE: Fumitremorgin C reverses multidrug resistance in cells
 transfected with the breast cancer resistance protein
 AUTHOR(S): Rabindran, Sridhar K.; Ross, Douglas D.; Doyle, L.
 Austin; Yang, Weidong; Greenberger, Lee M.
 CORPORATE SOURCE: Oncology and Immunoinflammatory Research, Wyeth-Ayerst
 Research, Pearl River, NY, 10965, USA
 SOURCE: Cancer Research (2000), 60(1), 47-50
 CODEN: CNREA8; ISSN: 0008-5472
 PUBLISHER: AACR Subscription Office
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 15 OF 47 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:27209 CAPLUS
 DOCUMENT NUMBER: 132:180759
 TITLE: Fumitremorgin C analogs that reverse mitoxantrone
 resistance in human colon carcinoma cells
 AUTHOR(S): He, Haiyin; Rabindran, Sridhar G.; Greenberger, Lee
 M.; Carter, Guy T.
 CORPORATE SOURCE: Natural Products Chemistry, Wyeth-Ayerst Research,
 Pearl River, NY, 10965, USA
 SOURCE: Medicinal Chemistry Research (1999), 9(6), 424-437
 CODEN: MCREEB; ISSN: 1054-2523
 PUBLISHER: Birkhaeuser Boston
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 16 OF 47 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:663792 CAPLUS
DOCUMENT NUMBER: 132:23122
TITLE: The N-Acyliminium Pictet-Spengler Condensation as a Multicomponent Combinatorial Reaction on Solid Phase and Its Application to the Synthesis of Demethoxyfumitremorgin C Analogues
AUTHOR(S): Wang, Haishan; Ganesan, A.
CORPORATE SOURCE: Institute of Molecular and Cell Biology, National University of Singapore, 117609, Singapore
SOURCE: Organic Letters (1999), 1(10), 1647-1649
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 132:23122
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 17 OF 47 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:511178 CAPLUS
DOCUMENT NUMBER: 131:143080
TITLE: A multidrug resistance protein associated with antitumor drug resistance in breast cancer and a cDNA encoding it
INVENTOR(S): Ross, Douglas D.; Doyle, L. Austin; Abruzzo, Lynne
PATENT ASSIGNEE(S): University of Maryland, Baltimore, USA
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9940110	A1	19990812	WO 1999-US2577	19990205
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2319715	AA	19990812	CA 1999-2319715	19990205
AU 9927610	A1	19990823	AU 1999-27610	19990205
AU 755567	B2	20021212		
EP 1054894	A1	20001129	EP 1999-908097	19990205
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
US 6313277	B1	20011106	US 1999-245808	19990205
JP 2002502592	T2	20020129	JP 2000-530538	19990205
US 2003036645	A1	20030220	US 2001-961086	20010921
PRIORITY APPLN. INFO.:			US 1998-73763P	P 19980205
			US 1999-245808	A3 19990205
			WO 1999-US2577	W 19990205
REFERENCE COUNT:	3			
				THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 18 OF 47 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:173577 CAPLUS
DOCUMENT NUMBER: 131:13477
TITLE: Multiple mechanisms confer drug resistance to

AUTHOR(S): mitoxantrone in the human 8226 myeloma cell line
Hazlehurst, Lori A.; Foley, Nils E.; Gleason-Guzman,
Mary C.; Hacker, Miles P.; Cress, Anne E.;
Greenberger, Lee W.; De Jong, Mariska C.; Dalton,
William S.
CORPORATE SOURCE: Department of Biochemistry, Pharmacology, and Internal
Medicine, H. Lee Moffitt Cancer Center, University of
South Florida, Tampa, FL, 33612, USA
SOURCE: Cancer Research (1999), 59(5), 1021-1028
CODEN: CNREA8; ISSN: 0008-5472
PUBLISHER: AACR Subscription Office
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 19 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:129321 CAPLUS
DOCUMENT NUMBER: 130:352456
TITLE: Total Synthesis of Spirotryprostatin A, Leading to the
Discovery of Some Biologically Promising Analogs
AUTHOR(S): Edmondson, Scott; Danishefsky, Samuel J.;
Sepp-Lorenzino, Laura; Rosen, Neal
CORPORATE SOURCE: Department of Chemistry, Columbia University, New
York, NY, 10027, USA
SOURCE: Journal of the American Chemical Society (1999),
121(10), 2147-2155
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 130:352456
REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 20 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:2922 CAPLUS
DOCUMENT NUMBER: 130:177236
TITLE: Reversal of a novel multidrug resistance mechanism in
human colon carcinoma cells by fumitremorgin C
AUTHOR(S): Rabindran, Sridhar K.; He, Haiyin; Singh, Maya; Brown,
Eileen; Collins, Karen I.; Annable, Tami; Greenberger,
Lee M.
CORPORATE SOURCE: Oncology and Immunology Research, Wyeth-Ayerst
Research, Pearl River, NY, 10965, USA
SOURCE: Cancer Research (1998), 58(24), 5850-5858
CODEN: CNREA8; ISSN: 0008-5472
PUBLISHER: AACR Subscription Office
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 21 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:808188 CAPLUS
DOCUMENT NUMBER: 130:261258
TITLE: Pharmacological activities of Aspergillus fumigatus
products and prospects as new antitumor drugs
AUTHOR(S): Zhu, Ping; Liu, Jubo
CORPORATE SOURCE: Institute of Materia Medica, Chinese Academy of
Medical Sciences, Peking Union Medical College,
Beijing, 100050, Peop. Rep. China
SOURCE: Zhongguo Yaoxue Zazhi (Beijing) (1998), 33(11),
645-648

PUBLISHER: Zhongguo Yaoxuehui
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Chinese
CODEN: ZYZAEU; ISSN: 1001-2494

L11 ANSWER 22 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:322579 CAPLUS
DOCUMENT NUMBER: 129:54474
TITLE: The total synthesis of spirotryprostatin A
AUTHOR(S): Edmondson, Scott D.; Danishefsky, Samuel J.
CORPORATE SOURCE: Department Chemistry, Columbia University, New York,
NY, 10021, USA
SOURCE: Angewandte Chemie, International Edition (1998),
37(8), 1138-1140
CODEN: ACIEF5; ISSN: 1433-7851
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 129:54474
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 23 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:191684 CAPLUS
DOCUMENT NUMBER: 128:294913
TITLE: Total synthesis of fumitremorgins and verruculogens
AUTHOR(S): Hino, Tohru; Nakagawa, Masako
CORPORATE SOURCE: Fac. Pharmaceutical Sci., Chiba Univ., Chiba, 263,
Japan
SOURCE: Heterocycles (1997), 46, 673-704
CODEN: HTCYAM; ISSN: 0385-5414
PUBLISHER: Japan Institute of Heterocyclic Chemistry
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
REFERENCE COUNT: 83 THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 24 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:16501 CAPLUS
DOCUMENT NUMBER: 128:23046
TITLE: Enantiospecific Synthesis of Optically Active
6-Methoxytryptophan Derivatives and Total Synthesis of
Tryprostatin A
AUTHOR(S): Gan, Tong; Liu, Ruiyan; Yu, Peng; Zhao, Shuo; Cook,
James M.
CORPORATE SOURCE: Department of Chemistry, University of Wisconsin,
Milwaukee, WI, 53201, USA
SOURCE: Journal of Organic Chemistry (1997), 62(26), 9298-9304
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 128:23046

L11 ANSWER 25 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:785131 CAPLUS
DOCUMENT NUMBER: 128:59275
TITLE: Growth and mycotoxin production by Aspergillus
fumigatus strains isolated from a saltern
AUTHOR(S): Tepsic, Katarina; Gunde-Cimerman, Nina; Frisvad, Jens
C.
CORPORATE SOURCE: Dep. Biotechnol. Ind. Mycol., Natl. Inst. Chem.,
Ljubljana, 1000, Slovenia
SOURCE: FEMS Microbiology Letters (1997), 157(1), 9-12

CODEN: FMLED7; ISSN: 0378-1097
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

L11 ANSWER 26 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:411507 CAPLUS
DOCUMENT NUMBER: 127:65985
TITLE: Concise synthesis of the cell cycle inhibitor
demethoxyfumitremorgin C
AUTHOR(S): Wang, Haishan; Ganesan, Arasu
CORPORATE SOURCE: Inst. Molecular Cell Biology, National University
Singapore, Singapore, 119260, Singapore
SOURCE: Tetrahedron Letters (1997), 38(24), 4327-4328
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 127:65985

L11 ANSWER 27 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:149254 CAPLUS
DOCUMENT NUMBER: 126:212283
TITLE: Enantiospecific total synthesis of tryprostatin A
AUTHOR(S): Gan, Tong; Cook, James M.
CORPORATE SOURCE: Dep. Chem., Univ. Wisconsin-Milwaukee, Milwaukee, WI,
53201, USA
SOURCE: Tetrahedron Letters (1997), 38(8), 1301-1304
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 126:212283

L11 ANSWER 28 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:123459 CAPLUS
DOCUMENT NUMBER: 126:220245
TITLE: Screening of cell cycle inhibitors from microbial
metabolites by a bioassay using a mouse cdc2 mutant
cell line, tsFT210
AUTHOR(S): Osada, Hiroyuki; Cui, Cheng-Bin; Onose, Rie; Hanaoka,
Fumio
CORPORATE SOURCE: The Institute of Physical and Chemical Research
(RIKEN), Saitama, 351-01, Japan
SOURCE: Bioorganic & Medicinal Chemistry (1997), 5(1), 193-203
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

L11 ANSWER 29 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:703657 CAPLUS
DOCUMENT NUMBER: 126:16546
TITLE: Isolation, structure determination and biological
activities of novel mammalian cell cycle inhibitors,
spirotryprostatins A & B, tryprostatins A & B and
related new diketopiperazine derivatives produced by a
fungus, Aspergillus fumigatus
AUTHOR(S): Cui, Cheng-Bin; Kakeya, Hideaki; Osada, Hiroyuki
CORPORATE SOURCE: Institute Physical and Chemical Research, Japan
SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1996),
38th, 49-54
CODEN: TYKYDS
PUBLISHER: Nippon Kagakkai.

DOCUMENT TYPE: Journal
LANGUAGE: Japanese

L11 ANSWER 30 OF 47 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:596801 CAPLUS
DOCUMENT NUMBER: 125:269949
TITLE: Novel mammalian cell cycle inhibitors,
spirotryprostatins A and B, produced by *Aspergillus*
fumigatus, which inhibit mammalian cell cycle at G2/M
phase
AUTHOR(S): Cui, Cheng-Bin; Kakeya, Hideaki; Osada, Hiroyuki
CORPORATE SOURCE: Inst. Phys. Chemical Res., Saitama, 351-01, Japan
SOURCE: Tetrahedron (1996), 52(39), 12651-12666
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

L11 ANSWER 31 OF 47 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:390297 CAPLUS
DOCUMENT NUMBER: 125:143111
TITLE: Novel mammalian cell cycle inhibitors, tryprostatins
A, B and other diketopiperazines produced by
Aspergillus fumigatus. II. Physico-chemical properties
and structures
AUTHOR(S): Cui, Cheng-Bin; Kakeya, Hideaki; Osada, Hiroyuki
CORPORATE SOURCE: Inst. Phys. Chem. Res., Saitama, 351-01, Japan
SOURCE: Journal of Antibiotics (1996), 49(6), 534-540
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English

L11 ANSWER 32 OF 47 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:390296 CAPLUS
DOCUMENT NUMBER: 125:81495
TITLE: Novel mammalian cell cycle inhibitors, tryprostatins
A, B and other diketopiperazines produced by
Aspergillus fumigatus. I. Taxonomy, fermentation,
isolation and biological properties
AUTHOR(S): Cui, Cheng-Bin; Kakeya, Hideaki; Okada, Gen; Onose,
Rie; Osada, Hiroyuki
CORPORATE SOURCE: Inst. Phys. Chem. Res., Saitama, 351-01, Japan
SOURCE: Journal of Antibiotics (1996), 49(6), 527-533
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English

L11 ANSWER 33 OF 47 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:650218 CAPLUS
DOCUMENT NUMBER: 119:250218
TITLE: Model studies related to the total synthesis of the
fumitremorgins; the Pictet-Spengler cyclization and
the formation and intramolecular acylation of a
1,2-dihydro-.beta.-carboline derivative
AUTHOR(S): Harrison, David M.; Sharma, Ram Bilas
CORPORATE SOURCE: Dep. Chem., Univ. Warwick, Coventry, CV4 7AL, UK
SOURCE: Tetrahedron (1993), 49(15), 3165-84
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 119:250218

L11 ANSWER 34 OF 47 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1993:428415 CAPLUS
 DOCUMENT NUMBER: 119:28415
 TITLE: An asymmetric route to the demethoxyfumitremorgins
 AUTHOR(S): Bailey, Patrick D.; Hollinshead, Sean P.; Mclay, Neil R.; Everett, Judith H.; Reynolds, Colin D.; Wood, Stephen D.; Giordano, Federico
 CORPORATE SOURCE: Dep. Chem., Univ. York, Heslington/York, YO1 5DD, UK
 SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1993), (4), 451-8
 CODEN: JCPRB4; ISSN: 0300-922X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 119:28415

L11 ANSWER 35 OF 47 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1992:210833 CAPLUS
 DOCUMENT NUMBER: 116:210833
 TITLE: Structures of cytotoxic substances and new quinazoline derivatives produced by a fungus from a saltwater fish
 AUTHOR(S): Numata, Atsushi; Takahashi, Chika; Miyamoto, Tamie; Matsushita, Tomochika; Kawai, Kenzo; Usami, Yoshihide; Matsumura, Eiko; Inoue, Masatoshi; Ohishi, Hirofumi; Shingu, Tetsuro
 CORPORATE SOURCE: Osaka Univ. Pharm. Sci., Osaka, Japan
 SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1991), 33rd, 723-30
 CODEN: TYKYDS
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese

L11 ANSWER 36 OF 47 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1990:424310 CAPLUS
 DOCUMENT NUMBER: 113:24310
 TITLE: A stereoselective entry to the fumitremorgins
 AUTHOR(S): Bailey, Patrick D.; Hollinshead, Sean P.; Mclay, Neil R.
 CORPORATE SOURCE: Dep. Chem., Univ. York, Heslington/York, YO1 5DD, UK
 SOURCE: Tetrahedron Letters (1989), 30(46), 6421-2
 CODEN: TELEAY; ISSN: 0040-4039
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 113:24310

L11 ANSWER 37 OF 47 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1990:99200 CAPLUS
 DOCUMENT NUMBER: 112:99200
 TITLE: A synthesis of so-called fumitremorgin C
 AUTHOR(S): Hino, Tohru; Kawate, Tomohiko; Nakagawa, Masako
 CORPORATE SOURCE: Fac. Pharm. Sci., Chiba Univ., Chiba, 260, Japan
 SOURCE: Tetrahedron (1989), 45(7), 1941-4
 CODEN: TETRAB; ISSN: 0040-4020
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 112:99200

L11 ANSWER 38 OF 47 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1990:33119 CAPLUS
 DOCUMENT NUMBER: 112:33119
 TITLE: Environmental factors influencing fumitremorgin production by Neosartorya fischeri
 AUTHOR(S): Beuchat, L. R.; Nielsen, P. V.; Frisvad, J. C.
 CORPORATE SOURCE: Dep. Food Sci. Technol., Univ. Georgia, Griffin, GA,

SOURCE: 30223-1797, USA
Bioactive Molecules (1989), 10 (Mycotoxins Phycotoxins
'88), 7-12
CODEN: BMOLEY; ISSN: 0921-0687
DOCUMENT TYPE: Journal
LANGUAGE: English

L11 ANSWER 39 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:594386 CAPLUS
DOCUMENT NUMBER: 111:194386
TITLE: Synthetic approaches to fumitremorgins. III.
Synthesis of optically active pentacyclic ring
systems, and their oxidation at ring C
AUTHOR(S): Nakagawa, Masako; Fukushima, Hiroshi; Kawate,
Tomohiko; Hongu, Mitsuya; Une, Teruaki; Kodato,
Shinichi; Taniguchi, Mikio; Hino, Toru
CORPORATE SOURCE: Fac. Pharm. Sci., Chiba Univ., Chiba, 260, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1989), 37(1),
23-32
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 111:194386

L11 ANSWER 40 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:454090 CAPLUS
DOCUMENT NUMBER: 111:54090
TITLE: Influence of atmospheric oxygen content on growth and
fumitremorgin production by a heat-resistant mold,
Neosartorya fischeri
AUTHOR(S): Nielsen, P. V.; Beuchat, L. R.; Frisvad, J. C.
CORPORATE SOURCE: Dep. Food Sci. Technol., Univ. Georgia, Griffin, GA,
30223-1797, USA
SOURCE: Journal of Food Science (1989), 54(3), 679-82, 685
CODEN: JFDSA; ISSN: 0022-1147
DOCUMENT TYPE: Journal
LANGUAGE: English

L11 ANSWER 41 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:95596 CAPLUS
DOCUMENT NUMBER: 110:95596
TITLE: Synthetic studies on fumitremorgins. II. First total
synthesis of (-)-fumitremorgin C
AUTHOR(S): Hermkens, Pedro H. H.; Plate, Ralf; Ottenheijm, Harry
C. J.
CORPORATE SOURCE: Dep. Org. Chem., Univ. Nijmegen, Nijmegen, 6525 ED,
Neth.
SOURCE: Tetrahedron (1988), 44(7), 1991-2000
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 110:95596

L11 ANSWER 42 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:549147 CAPLUS
DOCUMENT NUMBER: 109:149147
TITLE: Total synthesis of (+)-fumitremorgin B, its epimeric
isomers, and demethoxy derivatives
AUTHOR(S): Kodato, Shinichi; Nakagawa, Masako; Hongu, Mitsuya;
Kawate, Tomohiko; Hino, Toru
CORPORATE SOURCE: Fac. Pharm. Sci., Chiba Univ., Chiba, 260, Japan
SOURCE: Tetrahedron (1988), 44(2), 359-77
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal

LANGUAGE: English
OTHER SOURCE(S): CASREACT 109:149147

L11 ANSWER 43 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:55714 CAPLUS
DOCUMENT NUMBER: 108:55714
TITLE: Synthesis of fumitremorgin B and related compounds
AUTHOR(S): Nakagawa, Masako; Kodata, Shinichi; Hongu, Mitsuya;
Kawate, Tomohiko; Hino, Toru
CORPORATE SOURCE: Fac. Pharm. Sci., Chiba Univ., Chiba, Japan
SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1986),
28th, 473-80
CODEN: TYKYDS
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

L11 ANSWER 44 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:5744 CAPLUS
DOCUMENT NUMBER: 108:5744
TITLE: Tremorgenic mycotoxins. Synthesis of
6-demethoxyfumitremorgin B
AUTHOR(S): O'Malley, Gerard J.; Cava, Michael P.
CORPORATE SOURCE: Dep. Chem., Univ. Alabama, Tuscaloosa, AL, 35487-9671,
USA
SOURCE: Tetrahedron Letters (1987), 28(11), 1131-4
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 108:5744

L11 ANSWER 45 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1987:636297 CAPLUS
DOCUMENT NUMBER: 107:236297
TITLE: Total synthesis of fumitremorgin B
AUTHOR(S): Nakagawa, Masako; Kodato, Shinichi; Hongu, Mitsuya;
Kawate, Tomohiko; Hino, Tohru
CORPORATE SOURCE: Fac. Pharm. Sci., Chiba Univ., Chiba, 260, Japan
SOURCE: Tetrahedron Letters (1986), 27(51), 6217-20
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 107:236297

L11 ANSWER 46 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1987:176861 CAPLUS
DOCUMENT NUMBER: 106:176861
TITLE: Stereoselective synthesis of desmethoxy-(+)-
verruculogen TR-2
AUTHOR(S): Boyd, Steven A.; Thompson, Wayne J.
CORPORATE SOURCE: Dep. Chem. Biochem., Univ. California, Los Angeles,
CA, 90024, USA
SOURCE: Journal of Organic Chemistry (1987), 52(9), 1790-4
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 106:176861

L11 ANSWER 47 OF 47 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1987:156114 CAPLUS
DOCUMENT NUMBER: 106:156114
TITLE: Synthetic approach to the total synthesis of
fumitremorgins. II. Synthesis of optically active
pentacyclic intermediates and their dehydrogenation
AUTHOR(S): Nakagawa, Masako; Fukushima, Hiroshi; Kawate,

CORPORATE SOURCE: Tomohiko; Hongu, Mitsuya; Kodato, Shinichi; Une,
SOURCE: Teruaki; Taniguchi, Mikio; Hino, Toru
Fac. Pharm. Sci., Chiba Univ., Chiba, 260, Japan
Tetrahedron Letters (1986), 27(28), 3235-8
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 106:156114

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L14 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:703657 CAPLUS

DOCUMENT NUMBER: 126:16546

TITLE: Isolation, structure determination and biological activities of novel mammalian cell cycle inhibitors, spirotryprostatins A & B, tryprostatins A & B and related new diketopiperazine derivatives produced by a fungus, *Aspergillus fumigatus*

AUTHOR(S): Cui, Cheng-Bin; Kakeya, Hideaki; Osada, Hiroyuki

CORPORATE SOURCE: Institute Physical and Chemical Research, Japan

SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1996), 38th, 49-54

CODEN: TYKYDS

PUBLISHER: Nippon Kagakkai

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB A discussion is given on the prodn., isolation, structure detn., and biol. activities of the novel *Aspergillus fumigatus* diketopiperazine alkaloids spirotryprostatins A (I) and B, tryprostatins A (II) and B, and cyclotryprostatins B and D, the 3 new natural diketopiperazines cyclotryprostatins A (III) and C, and demethoxyfumitremorgin C (IV), and on several known diketopiperazines, such as **fumitremorgin C**. Structures of the new diketopiperazines were detd. mainly by spectroscopic methods. All of the compds. are inhibitors of the G2/M transition of tsFT210 cells at micromolar dosages. Some structure-activity relations were obsd.

ST *Aspergillus* diketopiperazine alkaloid cell cycle inhibitor; spirotryprostatin mammal cell cycle inhibitor *Aspergillus*; antitumor diketopiperazine alkaloid *Aspergillus*; tryprostatin mammal cell cycle inhibitor *Aspergillus*; neoplasm inhibitor diketopiperazine deriv *Aspergillus*

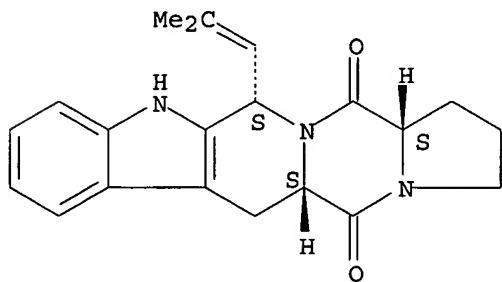
IT 111427-97-5P, Cyclotryprostatin C 111468-06-5P, Cyclotryprostatin A 111768-16-2P 118974-02-0P, **Fumitremorgin C**. 171864-80-5P, Tryprostatin A 179936-52-8P, Tryprostatin B 182234-25-9P, Spirotryprostatin A 182234-26-0P, Spirotryprostatin B 184305-67-7P, Cyclotryprostatin B 184305-68-8P, Cyclotryprostatin D

RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(diketopiperazine derivs. produced and isolated from *Aspergillus fumigatus* are novel mammalian cell cycle inhibitors)

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
 RN 111768-16-2 REGISTRY
 CN 5H,14H-Pyrrolo[1'',2'':4',5']pyrazino[1',2':1,6]pyrido[3,4-b]indole-5,14-dione, 1,2,3,5a,6,11,12,14a-octahydro-12-(2-methyl-1-propenyl)-, (5aS,12S,14aS)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 5H,14H-Pyrrolo[1'',2'':4',5']pyrazino[1',2':1,6]pyrido[3,4-b]indole-5,14-dione, 1,2,3,5a,6,11,12,14a-octahydro-12-(2-methyl-1-propenyl)-, [5aS-(5a.alpha.,12.beta.,14a.alpha.)]-
 OTHER NAMES:
 CN (+)-Demethoxyfumitremorgin C
 CN Demethoxyfumitremorgin C
 FS STEREOSEARCH
 MF C21 H23 N3 O2
 SR CA
 LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, CHEMINFORMRX, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

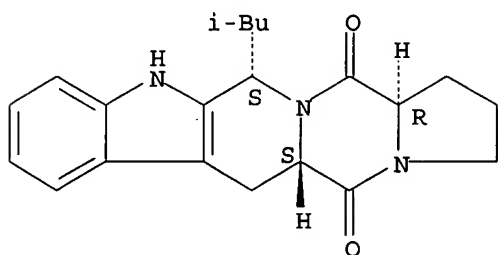
16 REFERENCES IN FILE CA (1957 TO DATE)
 16 REFERENCES IN FILE CAPLUS (1957 TO DATE)

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND
 SET COMMAND COMPLETED

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
 RN 107494-27-9 REGISTRY
 CN 5H,14H-Pyrrolo[1'',2'':4',5']pyrazino[1',2':1,6]pyrido[3,4-b]indole-5,14-dione, 1,2,3,5a,6,11,12,14a-octahydro-12-(2-methylpropyl)-, (5aS,12S,14aR)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 5H,14H-Pyrrolo[1'',2'':4',5']pyrazino[1',2':1,6]pyrido[3,4-b]indole-5,14-dione, 1,2,3,5a,6,11,12,14a-octahydro-12-(2-methylpropyl)-, [5aS-(5a.alpha.,12.beta.,14a.beta.)]-
 FS STEREOSEARCH
 MF C21 H25 N3 O2
 SR CA
 LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMINFORMRX, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1957 TO DATE)
 4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

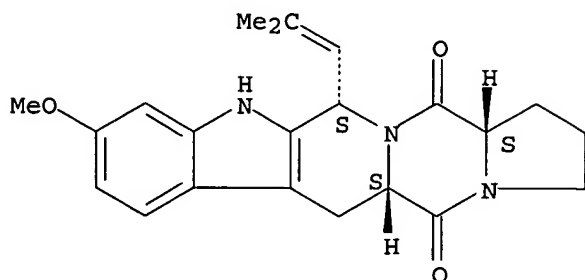
=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND
 SET COMMAND COMPLETED

10/08/6,169

L1 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2004 ACS on STN
RN 118974-02-0 REGISTRY

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

CN 5H,14H-Pyrrolo[1'',2'':4',5']pyrazino[1',2':1,6]pyrido[3,4-b]indole-5,14-dione, 1,2,3,5a,6,11,12,14a-octahydro-9-methoxy-12-(2-methyl-1-propenyl)-, (5aS,12S,14aS)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 5H,14H-Pyrrolo[1'',2'':4',5']pyrazino[1',2':1,6]pyrido[3,4-b]indole-5,14-dione, 1,2,3,5a,6,11,12,14a-octahydro-9-methoxy-12-(2-methyl-1-propenyl)-, [5aS-(5aα,12β,14α)]-

OTHER NAMES:

CN 12α-Fumitremorgin C

CN Fumitremorgin C